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Mapping and Bibliometric Analysis of *American Historical Review* Citations and Its Contribution to the Field of History

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Abstract. This paper aims to represent the bibliometric characteristics of the *American Historical Review* (AHR) in an attempt to highlight the journal's contribution to the field of History as one of the leading journals in Journal Citation Reports (JCR). AHR has the highest impact factor among the other journals in its field, and has been bringing together scholars from all over the world since 1895. Although the field of History is known as localized and non-interdisciplinarity, the present study's findings reveal that AHR has different characteristics compared to traditional contributions to the field of History by other journals. In addition, the results show that approximately three quarters of AHR citations, from 67 different categories, are gathered by articles. This indicates that AHR has an increased degree of convergence with other disciplines. These findings may be interpreted as an indication that traditional historical scholarly communication is increasingly changing toward interdisciplinarity. However, it would be problematic to generalize these findings for all history literature, based on a single journal evaluation. This study suggests that AHR has become increasingly diversified and consequently no longer reflects the main characteristics of the field of History. Future studies of more History journals are needed to validate the results and reveal possible changes in the field.

Keywords: American historical review; history literature; bibliometrics.

1. Introduction

The American historical review (AHR) is the official journal of the American historical association (AHA) and has brought together historians from all over the world since 1895 (American Historical Review, 2014). AHR is a main publisher in the field of history worldwide, and especially in North America (USA, Canada). The journal is published five times a year and its contents generally consist of book reviews (Historians.org, 2014). Journal citation reports (JCR) has listed it as the highest-impact journal in the field of History for 16 years, between 1997 and 2014 (Journal Citation Reports, 2014). Its impact factor for 2014 was 2.615, and its 5-year impact was 1.887. The second highest-impact journal in the field of History is the Economic History Review, with a 0.872 impact factor. There is a substantial gap between these two history journals in terms of their impact factors.

In order to identify scientific fields and contributions, bibliometricians have examined the indicators of science publications through their communication systems. The effects and scientific activities of journals can be mapped by means of bibliometric methods. It is important to understand and show journals affect scholarly communication in conjunction with accumulating number of journals in the scientific community. These studies represent the evolution of journals over time, and also help scholars identify which subjects are popular and which journals they can best submit their papers to. In addition, these studies reveal the hidden relations of and information about fields that have been shaped by scientific contributions.

2. Literature Review

Despite the fact that there are many bibliometric studies in the Social Sciences, they are limited in the field of Humanities. According to these limited studies, the basic bibliometric characteristics of the Humanities are as follows. Scholars have a tendency to publish their papers primarily as monographs (Hérubel, 1991; Dalton and Charnigo, 2004; Blaaiji, 2008; Sinn, 2012; Sinn and Soares, 2014); Historians generally publish their studies in national journals, most of which are not indexed at main citation databases, such as Web of Science and Scopus (Fernández-Izquierdo *et al.*, 2007; Sinn, 2012; Sinn and Soares, 2014). This decreases researchers' visibility in scientific areas. Alston (1952) focused on historians at the University of Chicago and found that historians use monographs twice as often as journals (Hérubel and Goedeken, 2001). In addition, collaboration with other disciplines is limited to History and the Social Sciences (Hérubel, 1990; Blaaiji, 2008; Buchanan and Hérubel, 2011). History authors tend to work alone and have low collaboration preferences (Fernández-Izquierdo *et al.*, 2007).

Studies of journal citations also provide valuable information for understanding the scientific networks and developments, the main subjects, publications, and authors of the area. The average number of citations per article, along with other indicators, is different for all disciplines. In the field of History, scholars use primary sources and monographs. Jones *et al.* (1972) examined the citation characteristics of British historians and their findings reveal that monographs and historical materials were the most-cited sources (Fernández-Izquierdo *et al.*, 2007). According to Hérubel's study on Garden History (1991), primary sources are crucial for historical research. Based on these studies' data, journals are rated second or third in terms of number of citations. Citation analysis of journals is also important regarding the effects of impact factor. In the field of History, researchers are accustomed to using primary sources. But main databases (e.g. WoS, Scopus) do not index such historical, primary sources; as a result, those sources cannot be counted when calculating the impact factor of journals (Marx, 2011).

3. Aim and Methodology

This study aims to map the bibliometric characteristics of AHR in order to demonstrate its contributions to the field of History as a leading journal ranked by

Journal Citation Reports (JCR). As mentioned in the introduction, the gap between the history journals that JCR ranks as first and second shows that AHR is different from other journals in its field. This study sets out to discover these differences by means of the results of its analysis and comparisons with background studies. To achieve this aim, the following research questions are addressed:

- What are the main characteristics of AHR publications? Are these characteristics similar to the literature background in the field of History?
- Which document types are most effective for AHR?
- Which factors make AHR a "top history journal"?

To reveal the bibliometric characteristics of History literature in AHR, we gathered collected all available information about publications in AHR between 1956 and 2015 by using Web of Science. A total of 55,486 publications were evaluated in-depth. In addition, we downloaded citations of AHR publications; a search was carried out on August 26, 2015, and 3711 publications that cite 22 frequently cited publications more than 100 times were downloaded.

SPSS and Excel Software were used to conduct statistical calculations and to create graphs and tables. In addition, the visualization tools named CiteSpace, created by Chaomi Chen, and VosViewer, developed by Leiden University, were used to demonstrate the created networks. The software manuals of these visualization tools make the creation of network maps accessible (van Eck and Waltman, 2013; Chen, 2014). Descriptions of the terms and concepts of bibliometrics that were used in this study are mentioned in the relevant parts of the paper.

4. Results

4.1. *Descriptive statistics*

According to descriptive statistics, the number of citations from 55,486 publications was 25,564. The most-preferred document type was book review, with a 96.09% distribution, followed by articles (2.12%), letters (0.94%), and reviews (0.35%).

Publications from 2015 had been cited once. This decrease of the number of citations in recent years was expected for all fields, and was likewise demonstrated in some of the literature (Glänzel and Schoepflin, 1999; Al *et al.*, 2006; Tang, 2008; Halevi, 2013). The half-life of a journal, which can be defined as "that time required for the obsolescence of one-half the currently published literature" (Burton and Kebler, 1960, pp. 18–19), was calculated as ">10" by JCR. Background studies supported these finding up to the 10-year half-life of the field of History (Al *et al.*, 2006; Taşkın and Doğan, 2014). The aggregate cited half-life of the field of History in JCR was likewise demonstrated as ">10". These findings imply that AHR articles had citation potential during these ten years. Figure 1 presents the distribution of publications and citations by year.

Figure 1 shows that publications in AHR have substantial citation potential. Although the average number of citations for all publications was 0.46 (median 0),
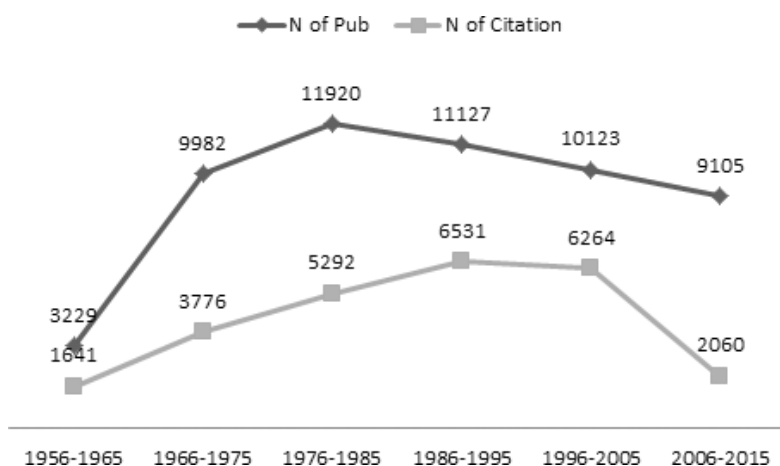
Fig. 1. Distribution of publication and citations by year.

the average number of citations of articles was 15.27 (median 8). This demonstrates the importance of articles for this journal. According to the results, 1061 of 1181 articles gathered at least one citation. This implies that, when any author publishes an article in AHR, there is a 90.17% possibility that they will be cited at least once. Although they constituted only 2.12% of the journal, the 70.55% of 25,564 citations was gathered by articles. The most-cited publication was "Gender: A Useful Category of Historical Analysis," written by Joan W. Scott in 1986; it gathered 627 citations on Web of Science. The subsequent article gathered 235 citations. This means that "Gender: A Useful Category of Historical Analysis" was the top AHR article by a wide margin. Figure 2, which was created by logarithmic scale, shows the distribution of articles, citations, uncited articles, and publications.

As Fig. 2 shows, article citations significantly influence journal impact factors. According to JCR, its calculation of impact factor was based on articles only
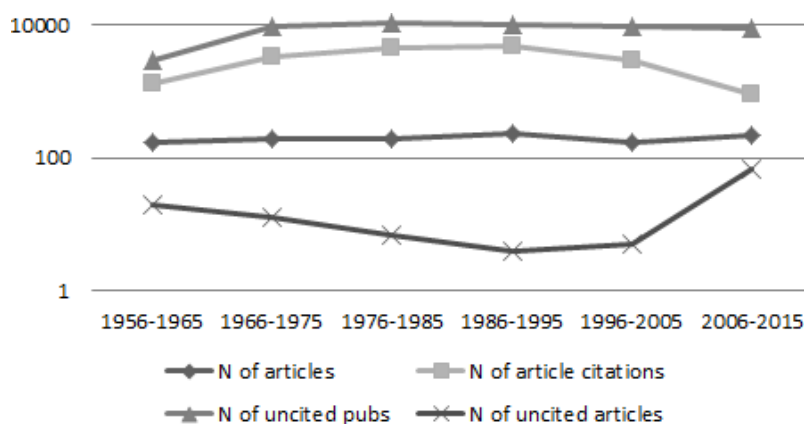

Fig. 2. Distribution of articles, citations, uncited articles, and uncited publications by year.

(Journal Citation Reports, 2012). The journal's current impact factor was 2.615, but changed to 0.073 when all document types were included in the calculations. Although AHR is a review journal, its trend in citation databases depends on articles, contrary to what the literature argues. Previous bibliometric studies that evaluated the field of History have claimed that reviews are the document type that historians use most (Hérubel, 1991; Hérubel and Goedeken, 2001; Dalton and Charnigo, 2004; Blaaiji, 2008; Sinn, 2012; Sinn and Soares, 2014). However, AHR showed different characteristics in the field of History. It was evident that articles made the journal a "top history journal."

4.2.   *Authors, institutions, countries, and collaboration statistics*

According to the results, the average number of authors per publication was 1.005 (median 1). A discussion entitled "Comparative History in Theory and Practice — a Discussion," published in 1982, had 11 authors and gathered one citation. An article entitled "General, I Have Fought Just as Many Nuclear Wars as You Have: Forecasts, Future Scenarios, and the Politics of Armageddon" followed with 10 authors. These findings verify that working alone is the overall approach in the field of History (Fernández-Izquierdo *et al.*, 2007; Taşkın and Doğan, 2014). 99.6% of articles in AHR were prepared by one author, whereas 216 articles were written by more than one author. Based on these findings, it is impossible to mention any collaboration network. In addition, the most productive authors cannot be ranked based on author variety. 77 publications (0.13% of all publications) were written by anonymous authors; Keith Hitchins, who published 41 publications in AHR, investigated these anonymous authors. 19,122 publications were written by a single author. These findings clearly show that AHR is one of the most preferred journals for a wide range of authors.

The variety of authors reflects the variety of institutions. 2679 single institutions published work in the AHR. The most productive institution was the University of Wisconsin, with 929 publications. Indiana University and the University of Illinois
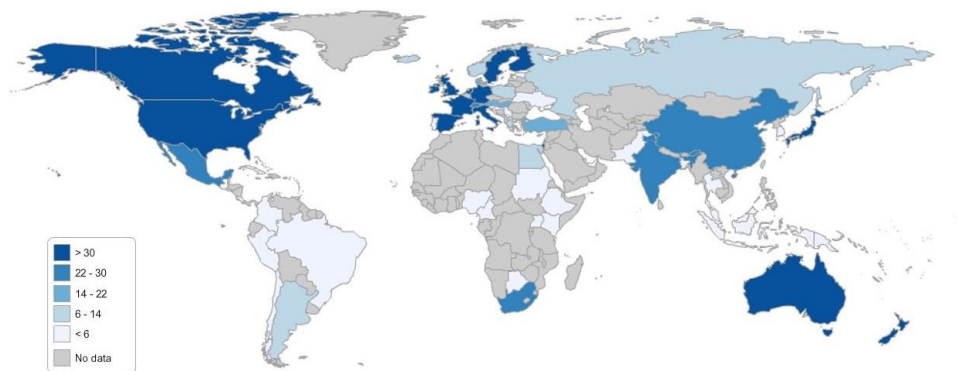

Fig. 3.   Distribution of most productive countries (drawn by StatPlanet).

followed. However, it is impossible to reconstruct any institutional collaboration network, due to single authorship preference. 74.55% of publications were written by authors from the USA, whereas 82 different countries were published in AHR overall. 14,121 publications did not have any authors from the USA. Although the journal's main focus is "American Historical Review," it has a wide publication network in Europe and other continents. Figure 3 shows the distribution of countries by means of colours. Darker colours represent the more productive countries. According to Figure 3, the most productive countries were the USA (74.55%), Canada (4.88%), and England (4.03%), respectively.

5. Evaluation of Citations

In the context of this study, 3609 publications that cited AHR were downloaded. However, publications that cited more than one AHR paper (i.e. duplicates) were excluded from the dataset. In total, 3321 publications were used to create maps and calculate the data.

The average number of authors of the cited publications was 1.24 (median 1). This shows that AHR papers and papers that cite AHR publications had the same characteristics in terms of author collaboration. A discussion entitled "The Spectatrix + The Female-Spectator" was written by the highest number of authors (58 authors); this publication gathered 751 cited references.

According to the distribution of citing publications by country, AHR was cited by 50 different countries; AHR publications and citers of AHR were from similar countries. Figure 4 clearly shows the origin of AHR citers.

Although there was no distinct overall citing country collaboration network (0.02 betweenness centrality rate), Austria, England, and Germany had the highest centrality in the network. Betweenness centrality was used to measure the extent of the role that a single node played in pulling the rest of the nodes in the network together (Chen *et al.*, 2008, p. 236). A higher node centrality indicates that the node is of
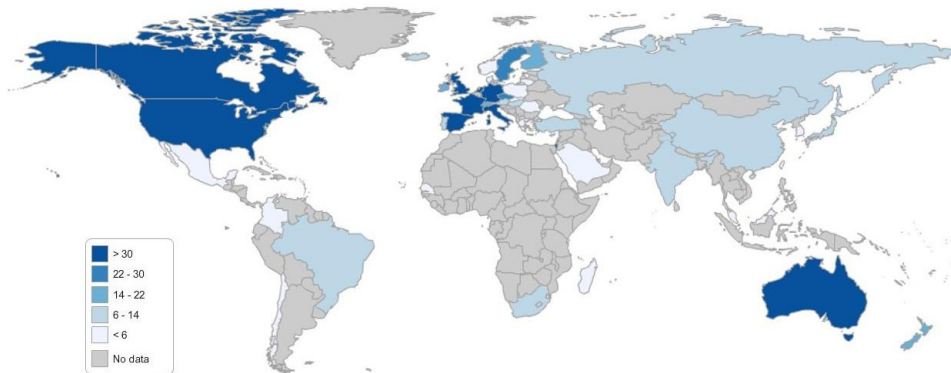

Fig. 4.   Citer countries of AHR (drawn by StatPlanet).

Table 1.   Distribution of citer countries and their centrality scores.

By Frequency			By Centrality		
Freq.	Cent.	Country	Cent.	Freq.	Country
1907	0.00	USA	0.30	8	Austria
198	0.28	England	0.28	198	England
177	0.00	Canada	0.27	165	Germany
165	0.27	Germany	0.20	25	Italy
132	0.11	Netherlands	0.18	23	Israel
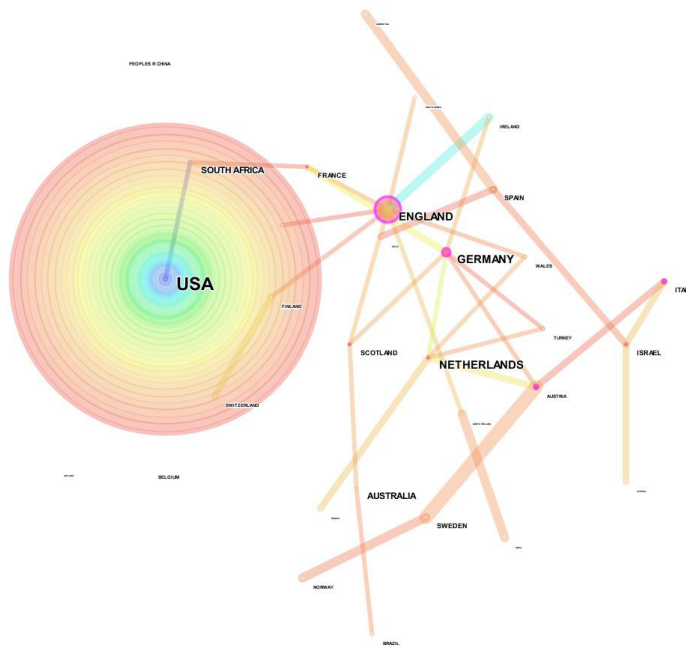
Fig. 5.   Collaboration network of citers (created by CiteSpace).

greater strategical importance. The expected centrality rate ranged between 0.40 and 0.60. Table 1 shows the citer countries, the number of their publications, and their centrality scores.

According to Table 1, a collaboration network was created by countries with high centrality. Figure 5 shows the collaboration network of citers.

6. Interdisciplinarity of Citations

Although the interdisciplinarity of the AHR publications could not be determined because only one subject category was indexed in Web of Science (i.e. History), it was possible to reveal the interdisciplinarity of the publications that cited AHR based on their keywords. Therefore, it was important to determine the

Fig. 6.   Keyword map of citing publications (created by VosViewer).
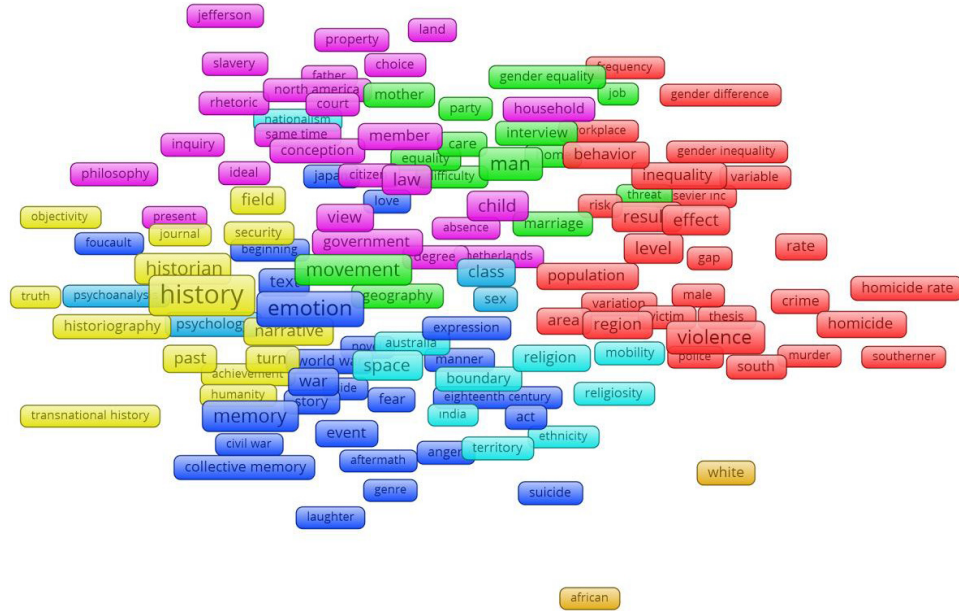
interdisciplinarity of journals in question in order to reveal the citation potentials of different subjects.

The VosViewer tool calculated 8 clusters of keywords, using titles and abstracts of studies that cited AHR. Figure 6 shows the clusters and name tags of these studies.

Figure 6 shows a wide range of keywords, from Women's studies to Religion. Clusters were distinguished by means of colors. The yellow, blue, and red clusters were the most prominent clusters in the network.

Figure 6 also shows that AHR has brought different disciplines together. A category network was drawn by Citespace to validate AHR's interdisciplinarity. Unsurprisingly, the journal's interdisciplinarity was in accordance with the CiteSpace network maps. Figure 7 represents the categorical network of citers. Citer categories were determined using the Web of Science categories of the relevant citer journals.

Figure 7 clearly shows that AHR was cited by journals on a wide range of subjects. This implies that, although AHR was indexed for only one subject, it had substantial citation potential for different disciplines. Based on 3711 citer publications, AHR gathered citations from 67 different Web of Science subject categories, from among its total of 249 subject categories (Thomson Reuters, 2012). It is evident that AHR is cited by at least 26% of Web of Science categories.

In addition to the above-discussed issues, the journal's interdisciplinarity was high. It gathered citations from many different subject categories. These findings demonstrate that AHR does not reflect the main features of the field of History in

Fig. 7.   Categorical network of citing publications (created by CiteSpace).

terms of interdisciplinarity (Hérubel, 1990; Blaaiji, 2008; Buchanan and Hérubel, 2011). Although many studies have revealed History to be a non-interdisciplinary field, the present study's findings on citer publications reveal that the field of History disperses to different fields, such as Criminology, Environmental Sciences, and Health care. Table 2 shows the disciplines that cited AHR, their frequencies, and centralities.

Table 2.   Disciplines that cited AHR, their frequencies and centralities.

By frequency			By centrality		
Freq.	Cent.	Category	Cent.	Freq.	Category
3457	0.09	History	125	0.40	Psychology
957	0.02	Government & Law	600	0.30	Social Sciences - Other Topics
600	0.30	Social Sciences - Other Topics	238	0.26	Anthropology
537	0.20	Women's Studies	312	0.22	History & Philosophy of Science
482	0.08	Sociology	114	0.22	Education & Educational Research
479	0.06	Arts & Humanities - Other Topics	537	0.20	Women's Studies
400	0.02	International Relations	28	0.18	Public
312	0.22	History & Philosophy of Science	68	0.12	Environmental Sciences & Ecology
279	0.02	Business & Economics	3457	0.09	History
264	0.02	Literature	6	0.09	Medical Ethics

7. Conclusions and Discussions

Bibliometric studies are used to determine the main features and information usage of disciplines. Understanding the features of a field may raise the quality of products and services presented to these fields. This paper aimed to reveal the main characteristics of the AHR and to compare it to background studies in the field of History. AHR is the top journal in the field of History; however, some of its characteristics are different from that field's common features. Although historians tend to use primary materials for their research (Jones *et al.*, 1972; Hérubel, 1991; Fernández-Izquierdo *et al.*, 2007) which causes the low impact factor of History journals (Marx, 2011), AHR's high impact factor (0.872) clearly shows that historians have recently started to use secondary resources, as well. The present study confirms that AHR authors prefer to work alone, like other History authors. In addition, the journal's half-life has several characteristics in common with the field of History overall. However, the interdisciplinarity of gathered citations and document types most-used by historians differ from the History literature. According to the literature, it AHR is expected to be cited by fields similar to History; however, 67 different fields have cited AHR, as part of an overall pattern from 1956–2015. Although AHR is a review journal, its trend in citation indexes depends on articles, contrary to what the literature argues. Approximately three out of four percent of citations are gathered by articles. These factors combined make AHR a unique journal in the field of History.

The journal attracts audiences from many different institutions and countries, and has no determined core-author or institution group. This indicates that its publication network is broad; however, there is no strong connection between the actors. These findings will be important for determining the journal's contribution to History and other fields. AHR may not only be indexed in the field of History, but also in several other fields. Web of Science may revise its subject categories, based on the results of this study.

The findings of this study show that either the field of History has changed or that bibliometric indicators do not provide efficient solutions for evaluating the field of History. When we consider the changes in the field of History, we can conclude that it has converged with other fields in recent years. This subsequently changes common knowledge of History. Conversely, if bibliometrics is not a good indicator for the field of History, future studies need to develop new techniques to evaluate it.

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